In the claims:

Please cancel claims 7-30, and add the following new claims:

40. [(New)] An apparatus as defined in claim 2, wherein the selected reagent mixture is formed by adjusting the flow rates of at least two reagent-mixture components in accordance with the respective flow-rate ratio.

41. [(New)] A method as defined in claim 31, comprising the step of forming each reagent mixture by adjusting the flow rates of at least two reagent-mixture components in accordance with the respective flow-rate ratio.

42. [(New)] An apparatus for at least one of particle and chemical analysis of reagent mixtures having a plurality of reagent-mixture components, comprising:

means for pumping each of a plurality of reagent-mixture components in a respective stream at a respective flow rate;

means for introducing at least one reagent-mixture component into a stream of at least one other reagent-mixture component to mix the plurality of reagent-mixture components into a combined reagent-mixture stream, said means including:

an elongated mixing chamber defining an upstream end, a downstream end, and an elongated axis extending between the upstream and downstream ends,

a first inlet port located at the upstream end of the mixing chamber and coupled in fluid communication with the pumping means, and defining a first inlet axis for introducing a first reagent-mixture component stream into the mixing chamber along the first inlet axis,

a second inlet port located downstream of the first inlet port and coupled in fluid communication with the pumping means, and defining a second inlet axis for introducing a second reagent-mixture component stream into the mixing chamber along the second inlet axis, wherein one